

What is claimed is:

1. A method for managing access, via an electronic message, to a file maintained within a first domain, the method comprising:

(a) displaying an electronic message window that includes a plurality of fields including a message recipient field, a file viewer field, and a file editor field;

(b) accepting message addresses by performing at least one of the following acts:

(1) recording, in the file viewer field, indicia identifying one or more addresses of viewers authorized to view the file; and

(2) recording, in the file editor field, indicia identifying one or more addresses of editors authorized to modify the file; and

(c) transmitting the electronic message to the addresses, at least some of which are within a second domain distinct from the first domain; and

(d) transmitting data of the file to the first domain separately from the electronic message.

2. The method of claim 1 wherein transmitting the electronic message further comprises transmitting, in or with the message, a reference to the file, the reference identifying a location of the file.

3. The method of claim 2 wherein transmitting the reference includes transmitting a hyperlink identifying a location of the file.
4. The method of claim 2 wherein transmitting the reference includes transmitting an attachment that includes code implementing a direct file access module.
5. The method of claim 1 further comprising:
- (a) including in the electronic message window a file identification field; and
 - (b) recording indicia identifying the file in the file identification field.
6. The method of claim 1 wherein displaying the electronic message window further comprises displaying a secondary message recipient field.
7. The method of claim 6 wherein displaying the electronic message window further comprises displaying a secret secondary message recipient field.
8. The method of claim 7 wherein displaying the electronic message window further comprises displaying labels near respective fields, wherein:
- (a) the message recipient field is labeled "TO:" or a linguistic equivalent thereof;
 - (b) the secondary message field is labeled "CC:" or a linguistic equivalent thereof;
- and

(c) the secret secondary message field is labeled "BCC:" or a linguistic equivalent thereof.

9. The method of claim 8 wherein displaying the electronic window further comprises displaying additional labels near respective fields, wherein:

(a) the file viewer field is labeled "VIEWER:" or a linguistic equivalent thereof; and

(b) the file editor field is labeled "EDITOR:" or a linguistic equivalent thereof.

10. The method of claim 1 further comprising transmitting data of the file to an address identified by indicia recorded in a message recipient field, as an attachment to the electronic message.

11. The method of claim 1 wherein displaying an electronic message window further comprises:

(a) accepting input from a user directing composition of an electronic message; and

(b) responsive to the input, transmitting display rendering indicia to a window display subsystem to cause display of the electronic message window.

12. The method of claim 11 wherein transmitting the electronic message comprises transmitting a series of data frames, the frames comprising:

(a) indicia identifying the file;

- (b) a message recipient address frame;
- (c) a file viewer address frame including a header and a first set of indicia associated therewith; and
- (d) a file editor address frame including a header and a second set of indicia associated therewith;

wherein

- (e) at least one of the first and second sets of indicia includes (1) for the first set, indicia identifying a person as a viewer authorized to view the file and (2) for the second set, indicia identifying a person as an editor authorized to modify the file.

13. The method of claim 12 further comprising:

- (a) at the second domain, receiving and displaying the message;
- (b) upon receipt of the message at an address of a person identified as a viewer or editor, permitting access to an image of the file; and
- (c) upon receipt of the message at an address of a person identified as an editor, further permitting access to modify the file.

14. A data storage medium comprising indicia of instructions for a processor to perform a method for managing access, via an electronic message, to a file maintained within a first domain, the method comprising:

- (a) displaying an electronic message window that includes a plurality of fields including a message recipient field, a file viewer field, and a file editor field;
- (b) designating one more addresses by performing at least one of the following acts:
 - (1) recording, in the file viewer field, indicia identifying one or more addresses of viewers authorized to view the file; and
 - (2) recording, in the file editor field, indicia identifying one or more addresses of editors authorized to modify the file;
- (c) transmitting indicia of the electronic message to the addresses, at least some of which are within a second domain distinct from the first domain; and
- (d) transmitting data of the file to the first domain separately from the electronic message.

15. A system for managing access, via an electronic message, to a file maintained within a first domain, the system comprising:

- (a) means for identifying addresses of one or more recipients of the message and designating each recipient as having viewing or editing privileges, respectively, of the file; and
- (b) means for transmitting the electronic message to the recipients within one or more domains distinct from the first domain such that, without transferring the file out of the first domain with the electronic message:

(1) any recipients designated as file viewers and recipients designated as file editors can access the file; and

(2) any recipients designated as file editors can modify the file.

16. A method for modifying operation of an electronic message program that, during normal operation, (1) displays a message window including a message recipient field and a file identification field and (2) generates an electronic message for transmission to one or more persons, the method comprising:

(a) causing the message window displayed by the electronic message program to further include a file viewer field and a file editor field; and

(b) causing the electronic message program to include, in the electronic message, indicia identifying any addresses identified in the file viewer field as belonging to viewers having viewing privileges of a file identified in the file identification field, and identifying any addresses identified in the file editor field as belonging to editors having editing privileges of the file.

17. The method of claim 16 further comprising, before the acts recited in parts (a) and (b), installing one or more dynamically linked library files to a folder designated for software plug-ins of the electronic message program.

18. The method of claim 16 further comprising preventing the electronic message program from transmitting the file as an attachment to addresses designated as file

viewers or file editors and, instead, causing the electronic message program to transmit to such addresses a reference to the file.

19. The method of claim 18 wherein causing the electronic message program to transmit a reference to the file comprises transmitting a hyperlink identifying a location of the file.

20. The method of claim 18 further comprising causing the electronic message program to indicate whether the file will be transmitted as an attachment to the electronic message or separately from the message.

21. The method of claim 16 wherein causing the message window to further include a file viewer field and a file editor field includes displaying labels near respective fields, wherein:

- (a) the file viewer field is labeled "VIEWER:" or a linguistic equivalent thereof; and
- (b) the file editor field is labeled "EDITOR:" or a linguistic equivalent thereof.

22. A data storage medium comprising indicia of instructions for a processor to perform a method for modifying operation of an electronic message program that, during normal operation, (1) displays a message window including a message recipient field and a file identification field and (2) generates an electronic message for transmission to one or more persons, the method comprising:

- (a) causing the message window displayed by the electronic message program to further include a file viewer field and a file editor field; and
- (b) causing the electronic message program to include, in the electronic message, indicia identifying any addresses identified in the file viewer field as belonging to viewers having viewing privileges of a file identified in the file identification field, and identifying any addresses identified in the file editor field as belonging to editors having editing privileges of the file.

23. The data storage medium of claim 22 wherein the indicia of instructions reside within one or more dynamically linked library files.

24. The data storage medium of claim 23 wherein the dynamically linked library files reside within a plug-in folder of the electronic message program.

25. An electronic message system comprising:

(a) an electronic message program that, during normal operation:

- (1) displays a message window including a message recipient field and a file identification field; and
- (2) generates an electronic message for transmission to one or more persons; and

(b) means for causing the message window to further include a file viewer field and a file editor field and include, in the electronic message, indicia designating any addresses identified in the file viewer or file editor fields as belonging to viewers or editors having viewing or editing privileges, respectively, of a file identified in the file identification field.

26. A propagated signal embodied in a message-encoded data stream having a series of data frames, the frames comprising:

- (a) reference data identifying a file;
- (b) a message recipient frame;
- (c) a file viewer frame including a header and a first set of indicia associated therewith; and
- (d) a file editor frame including a header and a second set of indicia associated therewith;

wherein

- (e) at least one of the first and second sets of indicia include (1) for the first set, indicia identifying an address of a viewer authorized to view the file and (2) for the second set, indicia identifying an address of an editor authorized to modify the file.

27. The signal of claim 26 wherein the reference data includes indicia of a location of the file.

28. A method for file access management comprising:

(a) maintaining a file within a first domain;

(b) operating a first computer to:

(1) accept input from a message sender and, responsive thereto, record indicia identifying one or more addresses as belonging to viewers authorized to view the file or to editors authorized to modify the file; and

(2) generate message-encoded indicia of an electronic message, the message including the indicia identifying addresses and further indicia identifying the file; and

(c) operating, at a second domain distinct from the first domain, a second computer coupled to the first computer and capable of accessing the file in the first domain via a network, to:

(1) display human-readable indicia of the message to one or more identified viewers or editors;

(2) accept input from the viewers or editors indicating a request for access to the file; and

(3) responsive to the input, selectively exchange data of the file with the first computer such that viewers can view but not modify the file and editors can view and modify the file.

29. A method for managing access, via an electronic message, to a file maintained within a first domain, the method comprising:

- (a) accepting one or more file accessor addresses;
- (b) for each address, determining an authorization status as either (1) authorized for direct file access or (2) not authorized for direct file access;
- (c) transmitting the electronic message to the addresses within at least a second domain distinct from the first domain;
- (d) for each electronic message sent to a file accessor address authorized for direct file access, transmitting data of the file separately from the electronic message; and
- (e) for each electronic message sent to a file accessor address not so authorized, transferring data of the file as an attachment to the electronic message.

30. The method of claim 29 wherein transmitting data of the file separately from the electronic message further comprises transmitting, in or with the message, a reference to the file identifying a location of the file.

31. The method of claim 30 wherein transmitting the reference includes transmitting a hyperlink identifying a location of the file.

32. The method of claim 30 wherein transmitting the reference includes transmitting an attachment that includes code implementing a direct file access module.

33. The method of claim 29 further comprising:

- (a) displaying an electronic message window that includes a plurality of fields including a message recipient field, a file viewer field, and a file editor field; and
- (b) accepting message addresses by performing at least one of the following acts:
 - (1) recording, in the file viewer field, indicia identifying one or more addresses of viewers authorized to view the file; and
 - (2) recording, in the file editor field, indicia identifying one or more addresses of editors authorized to modify the file.

34. The method of claim 33 further comprising:

- (a) including in the electronic message window a file identification field; and
- (b) recording indicia identifying the file in the file identification field.

35. The method of claim 33 wherein displaying the electronic message window further comprises displaying a secondary message recipient field.

36. The method of claim 35 wherein displaying the electronic message window further comprises displaying a secret secondary message recipient field.

37. The method of claim 36 wherein displaying the electronic message window further comprises displaying labels near respective fields, wherein:

- (a) the message recipient field is labeled "TO:" or a linguistic equivalent thereof;
- (b) the secondary message field is labeled "CC:" or a linguistic equivalent thereof;
- and
- (c) the secret secondary message field is labeled "BCC:" or a linguistic equivalent thereof.

38. The method of claim 37 wherein displaying the electronic window further comprises displaying additional labels near respective fields, wherein:

- (a) the file viewer field is labeled "VIEWER:" or a linguistic equivalent thereof; and
- (b) the file editor field is labeled "EDITOR:" or a linguistic equivalent thereof.

39. The method of claim 33 further comprising transmitting a copy of the file, to an address identified by indicia recorded in a message recipient field, as an attachment to the electronic message.

40. The method of claim 33 wherein displaying an electronic message window further comprises:

- (a) accepting input from a user directing composition of an electronic message; and

(b) responsive to the input, transmitting display rendering indicia to a window display subsystem to cause display of the electronic message window.

41. The method of claim 40 wherein transmitting the electronic message comprises transmitting indicia of the electronic message.

42. The method of claim 41 wherein transmitting indicia of the message comprises transmitting a series of data frames, the frames comprising:

- (a) indicia identifying the file;
- (b) a message recipient address frame;
- (c) a file viewer address frame including a header and a first set of indicia associated therewith; and
- (d) a file editor address frame including a header and a second set of indicia associated therewith;

wherein

- (e) at least one of the first and second sets of indicia includes (1) for the first set, indicia identifying a person as a viewer authorized to view the file and (2) for the second set, indicia identifying a person as an editor authorized to modify the file.

43. The method of claim 41 further comprising:

- (a) receiving, at the second domain, the indicia of the message and displaying the message;
- (b) upon receipt of the message at an address of a person identified as a viewer or editor, permitting access to an image of the file; and
- (c) upon receipt of the message at an address of a person identified as an editor, further permitting access to modify the file.